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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,450	06/26/2003	John C. Rudelic	ITL.1011US (P15536)	2953

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EXAMINER

DOAN, DUC T

ART UNIT

PAPER NUMBER

2188

DATE MAILED: 08/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/606,450

Applicant(s)

RUDELIC, JOHN C.

Examiner

Duc T. Doan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/30/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Status of Claims

Claims 1-25 are in the application.

Claims 1-25 are rejected.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,5-7,9-12,15-22,24-25 rejected under 35 U.S.C. 102 (a) as being anticipated by Conley (US Pub 2002/0099904).

As for claim 1, Conley describes a method comprising: setting an update to data of a memory to a valid status; and changing an original version of the data to a backup status. (Conley describes using a timestamp counter to determine the most recent change version of a data block due to an update write to the block; Conley's page 5, paragraph 56; Conley describes the updated data is written in a new block with an incrementing value of the counter. Conley's page 5, paragraph 51; Using the chronology values of the counter, the controller can easily

determine the new and superseded copies of data which corresponding to the claim's valid status and backup status of data; Conley's paragraph 52).

As for claims 5-6, Conley describes wherein changing the original version comprises changing a count value associated with the original version; wherein setting the update comprises associating a count value with the update (Conley's paragraph 51, lines 8-22)

As for claim 7, the claim recites setting a second update to the data to the valid status; and changing the update to the backup status. (Conley describes in paragraphs 56-57, the counter is used as the timestamp for each change in the data block. Therefore for the second update to the data block, an incrementing value of the counter will be assigned for the second update to the data).

As for claim 9, the claim rejected based on the same rationale as in the rejection of claim 1. Conley further describes associating a count with a first modification to a data object, the count indicative of a valid status (Conley's paragraph 50).

As for claim 10, Conley describes associating the count with a second modification to the data object (Conley describes for each modification, the count is incremented and assigned to the modification; Conley's paragraph 51, lines 12-22).

As for claim 11, the claim recites associating the first modification with a second count indicative of a backup status. The claim rejected based on the same rationale as in the rejection of claim 10. Conley clearly describes count values are used to distinguish between the new and superseded data values (Conley's paragraph 52).

As for claim 12, the claim recites associating a second count with an original version of the data object, the second count indicative of a backup status. Conley describes the count is used

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as timestamp for a data block (Conley's paragraph 56). Thus, when an update to the data block occurs, the timestamp value advances such that the count associating with the original data indicating an old copy.

Claim 15 rejected based on the same rationale as in the rejection of claim 9.

Claim 16 rejected based on the same rationale as in the rejection of claim 10.

Claim 17 rejected based on the same rationale as in the rejection of claim 11.

As for claim 22, the claim recites an apparatus comprising: at least one storage device to store code to set an update to data of a memory to a valid status and to change an original version of the data to a backup status. The claim rejected based on the same rationale as in the rejection of claims 9 and 12.

As for claim 24, Conley describes wherein the memory comprises a flash memory (Conley's paragraph 1).

Claim 25 rejected based on the same rationale as in the rejection of claim 19;

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2,3,13,23 rejected under 35 U.S.C. 103(a) as being unpatentable over Conley (US Pub 2002/0099904) as applied to claims 1,12,22 respectively and further in view of Matthews et al (US 5860124).

As for claim 2, the claim recites invalidating the original version if the update is committed. Conley does not describe the claim's detail of invalidating the original version. However, Matthews describes when the new data of the update write is written in a spare block, the "original" first block is invalidated (Matthews's column 7, lines 1-15). It would have been obvious to one of ordinary skill in the art at the time of invention to include the invalidating method as suggested by Matthews in Conley's system to prevent false operations to the older version of data (Matthews's column 8, lines 1-5).

As for claim 3, Conley describes reclaiming a space in the memory including the original version (Conley's paragraph 53).

Claims 13,23 rejected based on the same rationale as in claim 2.

Claims 4,8,14 rejected under 35 U.S.C. 103(a) as being unpatentable over Conley (US Pub 2002/0099904) as applied to claims 1,7,9 respectively and further in view of Ohran et al (US Pub 2002/0112134).

As for claim 4, the claim recites reinstating the original version if the update is aborted. Conley does not describe the claim's detail of reinstating the original version. However, Ohran describes a preservation memory capable of reconstruct to a backup copy; Ohran's page 2, paragraph 26; It would have been obvious to one of ordinary skill in the art at the time of

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invention to include the preservation memory as suggested by Ohran in Conley's system to restore data in a chronological order in the event of data corruption. (Ohran's paragraph 26).

As for claim 8, the claim recites unwinding from the second update to one of the update or the original version. The claim rejected based on the same rationale as in the rejection of claim 4. Ohran's describes in page 2, paragraph 16, the data can be reconstructed from a valid set of data or completely back to data at time t0.

Claim 14 rejected based on the same rationale as in claim 4.

Claims 18-21 rejected under 35 U.S.C. 103(a) as being unpatentable over Conley (US Pub 2002/0099904), in view of Hongo et al (US Pub 2003/0143971).

As for claim 18, the claim recites a system comprising: at least one storage device to store code to associate a count with a first modification to a data object, the count indicative of a valid status; the claim rejected based on the same rationale as in the rejection of claim 9. The claim further recites and an antenna coupled to the at least one storage device. Conley does not describe the claim detail's of an antenna. However, a memory system coupled to an antenna has been well known in the art, particular in the wireless communication area. This teaching is taught by Hongo et al (US Pub 2003.0143971; Fig 2: #200, #151, #230). It would have been obvious to one of ordinary skill in the art at the time of invention to include the antenna and packaging method as suggested by Hongo in Conley's system to provide transmitting and receiving radio module being packaged with memory components in a low cost board packaging. (Hongo's page 3, paragraphs 32,36).

As for claim 19, it rejected based on the same rationale as in the rejection of claim 18. Hongo further describes a coprocessor coupled to the at least one storage device to perform the code (Hongo's Fig 2: #220, #230, #231).

As for claim 20, it rejected based on the same rationale as in the rejection of claim 18. Hongo further describes wherein the coprocessor comprises a stacked processor of a multi-level flash memory (Hongo's page 9, paragraphs 108, 113 describes a memory/logic init module in a three-dimensional stacked on one another).

Claim 21 rejected based on the same rationale as in the rejection of claim 10.

Conclusion

When responding to the office action, Applicant is advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist examiner to locate the appropriate paragraphs.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc T. Doan whose telephone number is 571-272-4171. The examiner can normally be reached on M-F 8:00 AM 05:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mano Padmanabhan can be reached on 571-272-4210. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin L. Ellis
Primary Examiner
Kevin L. Ellis